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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,264	02/23/2004	Young-Geun Jang	678-1168	8870

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EXAMINER

KIM, WESLEY LEO

ART UNIT	PAPER NUMBER
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2617

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/785,264	Applicant(s) JANG, YOUNG-GEUN	
	Examiner Wesley L. Kim	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 16-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 and 16-18 is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This Office Action is in response to Amendment filed 4/30/07.
 - Claims 11 and 16-18 are currently amended.
 - Claims 12-15 are cancelled.
 - Claims 1-11 and 16-18 are pending in the current Office Action.

Response to Arguments

Applicant's arguments filed 4/30/07 have been fully considered but they are not persuasive.

- Applicant argues that Koster does not disclose detecting an initial service provider of a called terminal from the called terminal information and therefore the present invention is not obvious.

The examiner respectfully disagrees. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The rejection was made based on a combination of references. Giuhart teaches that redirection of calls to ported directory numbers are routed using the ported directory number as the called party number, from an originating network node towards the donor network node (Abstract;6-9). It is obvious that this concept would also apply to Koster's system of processing calls and providing local number portability in a wireless

communications environment, where the originating network (i.e. originating service provider) would comprise an MSC (Koster; Col.6;1-9, MSC's are essential for routing calls between wireless base stations and PSTN's and also allows mobile users to communicate with one another). Utilizing the ported directory number (i.e. the dialed number), the originating service provider would receive a call request at the first MSC and determine the initial service provider (i.e. donor service provider) and route the call accordingly.

- Applicant argues that Giuhat fails to teach that a network node is not created by a service provider as disclosed in claim 1 of the present invention.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., network node is not created by a service provider) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

- Applicant argues that Giuhat does not disclose detecting an initial service provider of a called terminal from the called terminal information and transmitting the call request signal to a communication network formed by the detected initial service provider of the called terminal.

The examiner respectfully disagrees. Giuhat does teach of detecting an initial service provider of a called terminal from the called terminal information and transmitting the call request signal to a communication network formed by the

detected initial service provider of the called terminal (Abstract;6-9). Using the called information, the originating network detects and directs the call to a donor network (i.e. initial service provider).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-2 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koster (US Patent 6240293 B1) in view of Giuhath et al (US Patent 5881145).

Regarding Claims 1 and 6, Koster teaches mobile communication system for providing a phone number maintaining service capable of allowing a user to continue to use a previously assigned phone number regardless of a change in service provider (Abstract), the system comprising:

a second MSC (Fig.1;55, donor service provider) for determining a changed service provider of the called terminal based on the called terminal information included in the call request signal transmitted from the first MSC (Col.6;53-55, donor service provider is associated with second MSC), and transmitting the call request signal to a communication network formed by the determined service provider (Col.6;55-57); and

a third MSC (Fig.1;65, ported-to service provider) for transmitting the call request signal received from the second MSC to the called terminal so that the

called terminal can communicate with the calling terminal over a communication network formed by the changed service provider (Col.6;53-55 and Col.6;1-9, call is routed to port-to service provider to connect the call via third MSC), however Koster **is silent on** a first mobile switching center (MSC) for receiving a call request signal with calling terminal information and called terminal information, determining an initial service provider of a called terminal from the called terminal information, and transmitting the call request signal to a communication network formed by the determined initial service provider of the called terminal.

Giuhat teaches that redirection of calls to ported directory numbers are routed using the ported directory number as the called party number, from an originating network node towards the donor network node (Abstract;6-9). It is obvious that this concept would also apply to Koster's system of processing calls and providing local number portability in a wireless communications environment, where the originating network (i.e. originating service provider) would comprise an MSC (Koster; Col.6;1-9, MSC's are essential for routing calls between wireless base stations and PSTN's and also allows mobile users to communicate with one another). Utilizing the ported directory number (i.e. the dialed number), the originating service provider would receive a call request at the first MSC and determine the initial service provider (i.e. donor service provider) and route the call accordingly.

To one of ordinary skill in the art, it would have been obvious to modify Koster with Giuhat since they are from similar search areas, viz. systems for providing number portability, such that a first mobile switching center (MSC) for receiving a call

request signal with calling terminal information and called terminal information, determining an initial service provider of a called terminal from the called terminal information, and transmitting the call request signal to a communication network formed by the determined initial service provider of the called terminal, to provide a method where number portability services may be provided in wireless telecommunication networks.

Regarding Claims 2 and 7, Koster further teaches a subscriber management database (DB) on every communication network formed by each service provider for storing service change information including information relating to an initial service provider of the calling terminal and the called terminal, and information relating to a change in the service provider (Col.6;37-46, NPDB); wherein the first MSC detects an initial service provider of the called terminal based on the service change information (Col.6;46-51 and Col.6;61-65, first MSC detects initial service provider based on LRN from the NPDB), and the second MSC determines whether a service of the called terminal is changed, based on the service change information (Col.6;46-51 and Col.6;61-65, second MSC determines whether a service of the called terminal is changed based on LRN from the NPDB).

2. Claims 3-5 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koster (US Patent 6240293 B1) and Giuhat et al (US Patent 5881145) in further view of Mazzearella et al (US Pub. 2002/0107011 A1).

Regarding Claims 3 and 8, Koster and Giuhat teaches all the limitations as recited in claims 2 and 7, however the combination is **silent on** the service change

information includes serial numbers of the calling terminal and the called terminal, a service provider change identification number, a service provider identification number, and a mobile identification number.

Mazzarella teaches that depending on the service provider the information needed to provide for a service change is different (Par.18;9-13). Mazzarella teaches that all of the following are necessary for providing number portability when a service is changed, the serial numbers of the calling terminal and called terminal (Par.16;9-16, i.e. ESN), a service provider change identification number (Par.18;9-11, new service providers ID), a service provider identification number (Par.14;8-12, the current provider is known), and a mobile identification number (Par.18;9-11, the MDN is the mobile identification number), therefore to the examiner it is obvious that a service change information could comprise of all the above.

To one of ordinary skill, in the art, it would have been obvious to modify Koster and Giuhart with Mazzarella at the time of the invention, since they are from similar search areas, viz. number portability, such that the service change information includes serial numbers of the calling terminal and called terminal, a service provider change identification number, a service provider identification number, and a mobile identification number, since it is obvious that all of the above are necessary for porting numbers between service providers even though they are not explicitly disclosed in every reference pertaining to the topic of number portability, to provide a means of correctly routing the call to the appropriate switching node at the destination recipient network.

Regarding Claims 4 and 9, the combination as discussed above teaches all the limitations as recited in claims 3 and 8, Koster teaches first MSC determines the dialed digits and routes the call paths (Col.6;1-9) and the first MSC can query the NPDB to determine appropriate treatment of a call (Col.9;1-2). It is obvious the first MSC determines the mobile identification number stored in the subscriber management DB, determines the service provider change identification number and the service provider identification number stored in association with the determined mobile identification number, and determines an initial service provider of the called terminal through the service provider change identification number and the service provider identification number (See rejection of Claim 3).

To one of ordinary skill, in the art, it would have been obvious to modify Koster and Giuhart with Mazzearella at the time of the invention, since they are from similar search areas, viz. number portability, such that the first MSC determines the mobile identification number stored in the subscriber management DB, determines the service provider change identification number and the service provider identification number stored in association with the determined mobile identification number, and determines an initial service provider of the called terminal through the service provider change identification number and the service provider identification number, since it is obvious that all of the above are necessary for porting numbers between service providers even though they are not explicitly disclosed in every reference pertaining to the topic of number portability, to provide a means of

correctly routing the call to the appropriate switching node at the destination recipient network.

Regarding Claims 5 and 10, the combination as taught above teaches all the limitations as recited in claims 4 and 9, and Koster further teaches the second MSC determines whether a service provider of the called terminal is changed, based on the service provider change identification number (Col.6;37-53, the MSC utilizes the NPDB to determine of a service provider of the called terminal is changed, based on the service provider change identification number).

Allowable Subject Matter

1. Claims 11 and 16-18 are allowed.
2. The following is a statement of reasons for the indication of allowable subject matter:

Claim 11 recites, *inter alia*, the service provider change identification number has two digits, a first digit indicates addition or subtraction on the service provider identification number and a second digit indicates a weight for performing addition or subtraction on the service provider identification number. These claims comprise a particular combination of elements, which is neither taught nor suggested by the prior art.

Claims 16-18 are allowable as being dependent on allowed claim 11.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

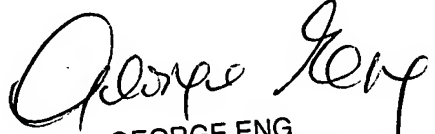
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesley L. Kim whose telephone number is 571-272-7867. The examiner can normally be reached on Monday-Friday 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WLK.

A handwritten signature in black ink, appearing to be 'WLK.' followed by a stylized flourish.A handwritten signature in black ink, appearing to be 'George Eng'.

GEORGE ENG
SUPERVISORY PATENT EXAMINER